Case Study: HIV/AIDS in Botswana

Name and locate your case study

The country of Botswana is in Southern Africa (*please note this is not the same thing as 'South Africa' which is another country in Southern Africa!*).

Botswana is also described as a *Sub-Saharan country* because it is South of the Sahara Desert.

What are the facts about HIV and AIDs?

- HIV – Human Immunodeficiency Virus (a retro virus which attacks white blood cells destroying the body's ability to fight infection)
- AIDS – Acquired Immune Deficiency Syndrome
- At present there is no cure for the disease which affects 40 million people worldwide
- However, anti-retroviral drugs can prolong life.
- *In MEDCs the average gap between HIV infection and the development of AIDS is over 10 years whilst in LEDCs 50% of HIV carriers are dead within 3 Years often from secondary diseases e.g.TB.*

How does AIDS spread?

- The exchange of body fluids through sexual intercourse
- From mother to child during pregnancy.
- Through contaminated needle use (especially by drug users)
- Through contaminated blood transfusions
- *In the case of Botswana the first and second causes are the most important.*

From the 1970's – Present: The disease first spread amongst bisexual, homosexual and drug-using communities in North America and Europe

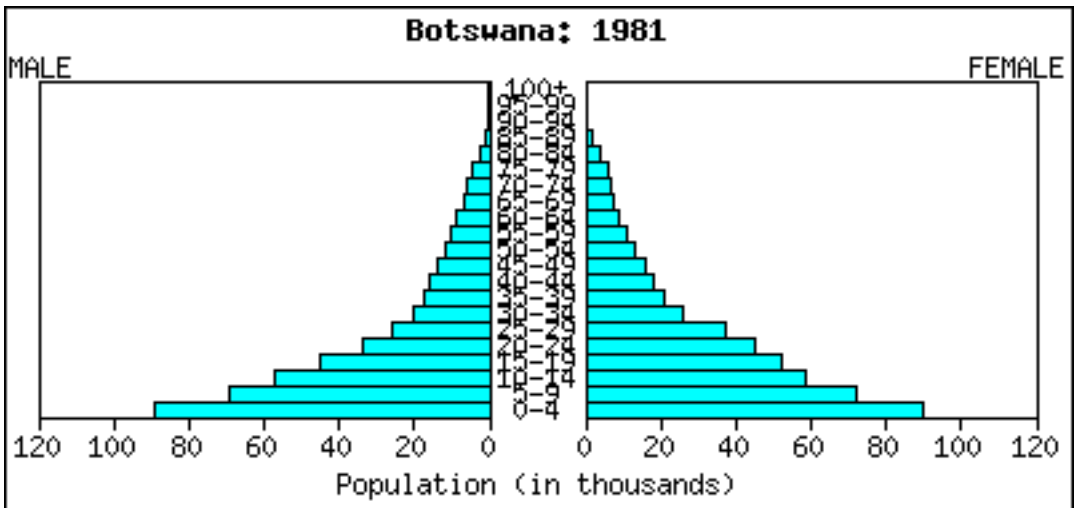
It then spread amongst the general population through heterosexual sex affecting most of Sub Saharan Africa (including Botswana) in particular. Recently there has been a growth of the disease in Eastern Europe and the former soviet republics mainly through blood transfusions and intravenous drug abuse.

Why is an LEDC like Botswana so vulnerable to the disease?

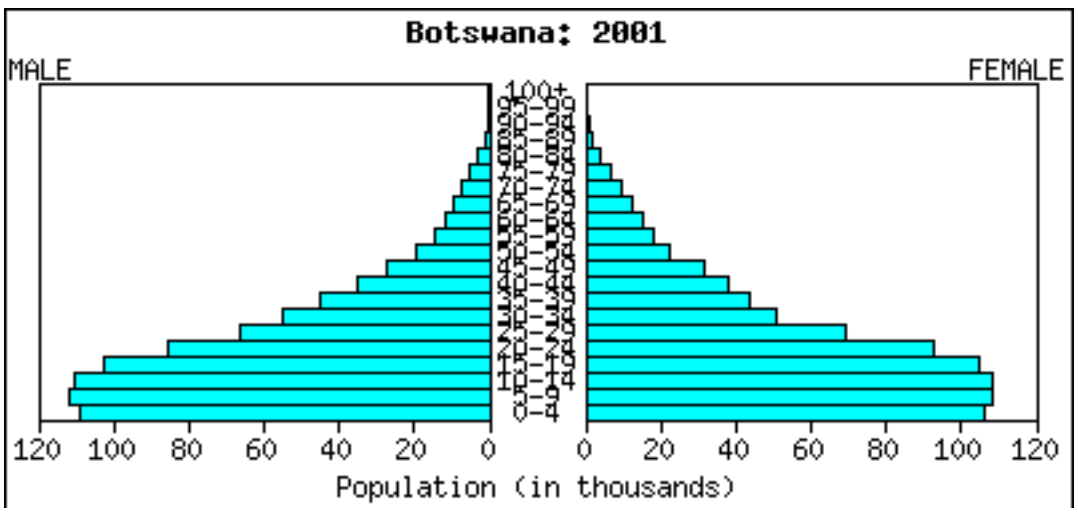
- **Inadequate education** – Children and adults do not have very much knowledge in this topic and therefore do not understand the consequences of unprotected sex.
- **Low availability of contraceptives**– Without contraceptives, unprotected sex will continue to occur.
- **Low social status of women** – Women are perceived by society as "child bearers" and therefore cannot disapprove of unprotected sex. In addition, men are seen to be more powerful than women in decision-making.
- **Poverty** – Families with very little money are not able to afford any anti-retroviral drugs
- **Low availability of medical treatment, testing and counselling –** Those who are infected cannot be treated and have no encouragement to have a positive outlook. They may not even know if they have the virus and that they are spreading it because they have not been tested.

What are the demographic effects of the disease in Botswana

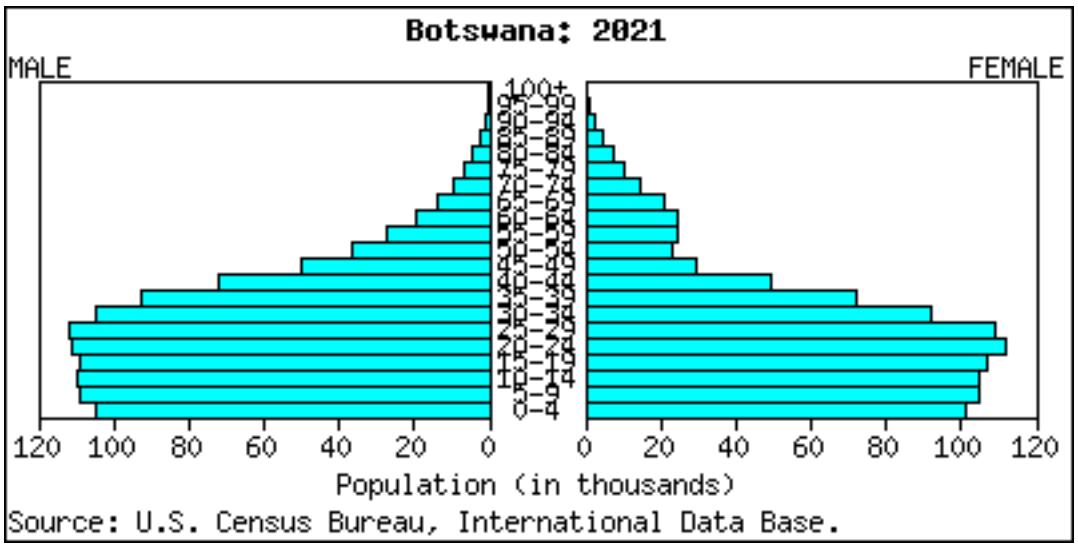
- 39% of adult population have the disease in Botswana
- **Life expectancy** has dropped from 74 to 30 years (2007) and **natural increase** will slow to close to zero



1991 (above): this is the standard **age-sex structure** of an **LEDC** at **stage 2** of the **DTM**, before HIV/AIDS.



2001: The percentage of the population who are **sexually active** has reduced as we might have expected as **HIV/AIDS** infection reaches its peak. The **birth rate** has fallen as a result.



2021 (the predicted future): notice there are particularly few females in the 40-60 age groups which were most affected by HIV/AIDS around the year 2000 and the continual reduction in **birth rate**.

<u>What are the **social effects**?</u>

Families in poverty cannot afford the **medical healthcare**. Consequently the **death rate** is increasing and therefore:

- Children become orphans and are devastated due to parent loss.
- Family **income** drops because of parent loss. Children are kept out of school to help with the **income** by working on farms. The **standard of living** is therefore reduced and the children have limited careers.
- People have a negative outlook on life when they get the virus.
- The **population** becomes paranoid of the virus.
- Increases the **students per teacher** and **people per doctor** ratios. This means less **education** and fewer chances of medical help.
- Families, particularly men, may **in-migrate** to meet the local demand for workers. The men may sleep with an HIV infected woman and bring the virus back into their hometown.

<u>What are the economic effects?</u>

- Orphaned children become dependant on non-working grandparents which leads to further poverty. Some may need to survive on their own by stealing.
- Decrease in **industrial** and **agricultural productivity per capita** leading to poverty and food shortages
- A lower **life expectancy** decreases the time and therefore amount of work a person is expected to do. The decreased **pool of labour** reverses the country's **economic growth**.
- It has been projected that the economy of the country will be one third smaller in 2021 than it might have been without the **epidemic** (disease)
- The money that could be invested in the country's **infrastructure** may be used instead to buy anti-retroviral drugs to cope with the virus' stress on medical healthcare.
- *It has been estimated that by 2010 total government funding in Health will have to increase by 20% on 2005 figure despite a reduction in the workforce*
- Due to country's social unreliability **multinational companies** prefer not to **invest** in the economy and **tourists** prefer not want to visit the country.

The focus for many people is now on immediate survival rather than the long-term planning.

<u>What is Botswana doing to combat the problem?</u>

- In 2002 Botswana became the first African country to offer free condoms to its population
- Anti-retroviral drugs are provided by government clinics (*tapping in to the wealth created from the Diamond industry in the country*)
- More government money is going in to AIDS Education programmes
- The governments spending on health will increase by 3% per year over the next 10 years.
- Free HIV tests are offered at local medical centres
- *Botswana is working on high-tech food security initiatives, so for example they may use HYVs for crops to guarantee a food supply even though the number of farm labourers is decreasing*.